

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number:

10/665,883

Source:

ITWO

Date Processed by STIC:

3-7-05

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/665,883

DATE: 03/07/2005

TIME: 10:56:23

Input Set : D:\46699-20011.00 - Seqlist.txt
 Output Set: N:\CRF4\03072005\J665883.raw

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4 <110> APPLICANT: YUAN, Chong-Sheng
6 <120> TITLE OF INVENTION: DETERMINATION OF IONS USING
7   ION-SENSITIVE ENZYMES
9 <130> FILE REFERENCE: 466992001100
11 <140> CURRENT APPLICATION NUMBER: US 10/665,883
12 <141> CURRENT FILING DATE: 2003-09-19
14 <160> NUMBER OF SEQ ID NOS: 18
16 <170> SOFTWARE: FastSEQ for Windows Version 4.0
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 12
20 <212> TYPE: PRT
21 <213> ORGANISM: Artificial Sequence
23 <220> FEATURE:
24 <223> OTHER INFORMATION: 40%-100% identity to leader sequence
26 <400> SEQUENCE: 1
27 Met Gly Gly Ser Gly Asp Asp Asp Asp Leu Ala Leu
28   1           5           10
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 356
33 <212> TYPE: PRT
34 <213> ORGANISM: Artificial Sequence
36 <220> FEATURE:
37 <223> OTHER INFORMATION: 40%-100% identity to the biphosphate nucleotidase
39 <400> SEQUENCE: 2
40 Ala Leu Glu Arg Glu Leu Leu Val Ala Thr Gln Ala Val Arg Lys Ala
41   1           5           10           15
42 Ser Leu Leu Thr Lys Arg Ile Gln Ser Glu Val Ile Ser His Lys Asp
43   20          25          30
44 Ser Thr Thr Ile Thr Lys Asn Asp Asn Ser Pro Val Thr Thr Gly Asp
45   35          40          45
46 Tyr Ala Ala Gln Thr Ile Ile Asn Ala Ile Lys Ser Asn Phe Pro
47   50          55          60
48 Asp Asp Lys Val Val Gly Glu Glu Ser Ser Gly Leu Ser Asp Ala
49   65          70          75          80
50 Phe Val Ser Gly Ile Leu Asn Glu Ile Lys Ala Asn Asp Glu Val Tyr
51   85          90          95
52 Asn Lys Asn Tyr Lys Lys Asp Asp Phe Leu Phe Thr Asn Asp Gln Phe
53   100         105         110
54 Pro Leu Lys Ser Leu Glu Asp Val Arg Gln Ile Ile Asp Phe Gly Asn
55   115         120         125
56 Tyr Glu Gly Gly Arg Lys Gly Arg Phe Trp Cys Leu Asp Pro Ile Asp
57   130         135         140
58 Gly Thr Lys Gly Phe Leu Arg Gly Glu Gln Phe Ala Val Cys Leu Ala

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59 145 150 155 160
 60 Leu Ile Val Asp Gly Val Val Gln Leu Gly Cys Ile Gly Cys Pro Asn
 61 165 170 175
 62 Leu Val Leu Ser Ser Tyr Gly Ala Gln Asp Leu Lys Gly His Glu Ser
 63 180 185 190
 64 Phe Gly Tyr Ile Phe Arg Ala Val Arg Gly Leu Gly Ala Phe Tyr Ser
 65 195 200 205
 66 Pro Ser Ser Asp Ala Glu Ser Trp Thr Lys Ile His Val Arg His Leu
 67 210 215 220
 68 Lys Asp Thr Lys Asp Met Ile Thr Leu Glu Gly Val Glu Lys Gly His
 69 225 230 235 240
 70 Ser Ser His Asp Glu Gln Thr Ala Ile Lys Asn Lys Leu Asn Ile Ser
 71 245 250 255
 72 Lys Ser Leu His Leu Asp Ser Gln Ala Lys Tyr Cys Leu Leu Ala Leu
 73 260 265 270
 74 Gly Leu Ala Asp Val Tyr Leu Arg Leu Pro Ile Lys Leu Ser Tyr Gln
 75 275 280 285
 76 Glu Lys Ile Trp Asp His Ala Ala Gly Asn Val Ile Val His Glu Ala
 77 290 295 300
 78 Gly Gly Ile His Thr Asp Ala Met Glu Asp Val Pro Leu Asp Phe Gly
 79 305 310 315 320
 80 Asn Gly Arg Thr Leu Ala Thr Lys Gly Val Ile Ala Ser Ser Gly Pro
 81 325 330 335
 82 Arg Glu Leu His Asp Leu Val Val Ser Thr Ser Cys Asp Val Ile Gln
 83 340 345 350
 84 Ser Arg Asn Ala
 85 355
 88 <210> SEQ ID NO: 3
 89 <211> LENGTH: 17
 90 <212> TYPE: PRT
 91 <213> ORGANISM: Artificial Sequence
 93 <220> FEATURE:
 94 <223> OTHER INFORMATION: 40%-100% identity to the second bacterial leader
 95 sequence
 97 <400> SEQUENCE: 3
 98 Lys Gly Glu Leu Glu Gly Leu Pro Ile Pro Asn Pro Leu Leu Arg Thr
 99 1 5 10 15
 100 Gly
 104 <210> SEQ ID NO: 4
 105 <211> LENGTH: 356
 106 <212> TYPE: PRT
 107 <213> ORGANISM: Artificial Sequence
 109 <220> FEATURE:
 110 <223> OTHER INFORMATION: Chimeric protein
 112 <400> SEQUENCE: 4
 113 Ala Leu Glu Arg Glu Leu Leu Val Ala Thr Gln Ala Val Arg Lys Ala
 114 1 5 10 15
 115 Ser Leu Leu Thr Lys Arg Ile Gln Ser Glu Val Ile Ser His Lys Asp
 116 20 25 30

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117 Ser Thr Thr Ile Thr Lys Asn Asp Asn Ser Pro Val Thr Thr Gly Asp
118 35 40 45
119 Tyr Ala Ala Gln Thr Ile Ile Asn Ala Ile Lys Ser Asn Phe Pro
120 50 55 60
121 Asp Asp Lys Val Val Gly Glu Ser Ser Ser Gly Leu Ser Asp Ala
122 65 70 75 80
123 Phe Val Ser Gly Ile Leu Asn Glu Ile Lys Ala Asn Asp Glu Val Tyr
124 85 90 95
125 Asn Lys Asn Tyr Lys Lys Asp Asp Phe Leu Phe Thr Asn Asp Gln Phe
126 100 105 110
127 Pro Leu Lys Ser Leu Glu Asp Val Arg Gln Ile Ile Asp Phe Gly Asn
128 115 120 125
129 Tyr Glu Gly Gly Arg Lys Gly Arg Phe Trp Cys Leu Asp Pro Ile Asp
130 130 135 140
131 Gly Thr Lys Gly Phe Leu Arg Gly Glu Gln Phe Ala Val Cys Leu Ala
132 145 150 155 160
133 Leu Ile Val Asp Gly Val Val Gln Leu Gly Cys Ile Gly Cys Pro Asn
134 165 170 175
135 Leu Val Leu Ser Ser Tyr Gly Ala Gln Asp Leu Lys Gly His Glu Ser
136 180 185 190
137 Phe Gly Tyr Ile Phe Arg Ala Val Arg Gly Leu Gly Ala Phe Tyr Ser
138 195 200 205
139 Pro Ser Ser Asp Ala Glu Ser Trp Thr Lys Ile His Val Arg His Leu
140 210 215 220
141 Lys Asp Thr Lys Asp Met Ile Thr Leu Glu Gly Val Glu Lys Gly His
142 225 230 235 240
143 Ser Ser His Asp Glu Gln Thr Ala Ile Lys Asn Lys Leu Asn Ile Ser
144 245 250 255
145 Lys Ser Leu His Leu Asp Ser Gln Ala Lys Tyr Cys Leu Leu Ala Leu
146 260 265 270
147 Gly Leu Ala Asp Val Tyr Leu Arg Leu Pro Ile Lys Leu Ser Tyr Gln
148 275 280 285
149 Glu Lys Ile Trp Asp His Ala Ala Gly Asn Val Ile Val His Glu Ala
150 290 295 300
151 Gly Gly Ile His Thr Asp Ala Met Glu Asp Val Pro Leu Asp Phe Gly
152 305 310 315 320
153 Asn Gly Arg Thr Leu Ala Thr Lys Gly Val Ile Ala Ser Ser Gly Pro
154 325 330 335
155 Arg Glu Leu His Asp Leu Val Val Ser Thr Ser Cys Asp Val Ile Gln
156 340 345 350
157 Ser Arg Asn Ala
158 355
161 <210> SEQ ID NO: 5
162 <211> LENGTH: 1176
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Nucleotide sequence encoding a chimeric protein
169 <400> SEQUENCE: 5

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170 atgggcggat ccgggtgatga cgatgaccc tc gccc ttgc at tggaa agaga attattggtt 60
171 gcaactcaag ctgtacgaaa ggcgtctta ttgactaaga gaattcaatc tgaagtgatt 120
172 ttc tacaagg actccactac tattaccaag aatgataatt ctccagtaac cacaggtgat 180
173 tatgctgcac aaacgatcat cataaaatgct atcaagagca attttccctga tgataaggta 240
174 gttggtaaag aatccatc aggattgagc gacgcattcg tctcaggaat tttaaacgaa 300
175 ataaaagcca atgacaagt ttataacaag aattataaaa aggatgattt tctgtttaca 360
176 aacgatcagt ttccgctaaa atctttggag gacgtcaggc aaatcatcga tttcggcaat 420
177 tacgaagggt gtagaaaagg aagattttg tggttggatc ctattgacgg aacc aagggg 480
178 tttttaagag gtgaacagtt tgcagtatgt ctggccttaa ttgtggacgg tgg tttcag 540
179 cttgggtgttta ttggatgccc caacttagtt ttaagttctt atggggccca agatttggaaa 600
180 ggccatgagt catttggta tatctttcg t gctgttagag gtttaggtgc ctcttattct 660
181 ccatcttcag atgcagagtc atggacccaa atccacgtaa gacactaaa agacactaaa 720
182 gacatgatta cttagaggg agttgaaaag ggacactcct ctcatgatga acaaactgct 780
183 atcaaaaaca aactaaatat atccaaatct ttgcacttgg attctcaagc caagtactgt 840
184 ttgttagcat tgggcttagc agacgtataat ttacgtctgc ctatcaaact ttcttaccaa 900
185 gaaaagatct gggaccatgc tgcaggcaac gttattgtcc atgaagctgg aggtatccat 960
186 acagatgcca tggaaatgtt ctctctagac ttcgtaacg gtagaacgct agtacgaaag 1020
187 ggagttatacg cgtcaagtgg cccacgcgag ttacatgact tgg tgggtgc tacatcatgc 1080
188 gatgtcattc agtcaagaaa cgccaaaggc gagcttgaag gtttgcctat ccctaaccct 1140
189 ctccctccgtt ccggcatca tcaccatcac cattga 1176

191 <210> SEQ ID NO: 6
192 <211> LENGTH: 7
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Exemplary epitope tag
199 <400> SEQUENCE: 6
200 Asp Tyr Lys Asp Asp Asp Lys
201 1 5
204 <210> SEQ ID NO: 7
205 <211> LENGTH: 9
206 <212> TYPE: PRT
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Exemplary epitope tag
212 <400> SEQUENCE: 7
213 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
214 1 5
217 <210> SEQ ID NO: 8
218 <211> LENGTH: 11
219 <212> TYPE: PRT
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Exemplary epitope tag
225 <400> SEQUENCE: 8
226 Cys Gln Asp Leu Pro Gly Asn Asp Asn Ser Thr
227 1 5 10
230 <210> SEQ ID NO: 9
231 <211> LENGTH: 10

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232 <212> TYPE: PRT
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Exemplary epitope tag
238 <400> SEQUENCE: 9
239 Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
240 1 5 10
243 <210> SEQ ID NO: 10
244 <211> LENGTH: 6
245 <212> TYPE: PRT
246 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: Exemplary epitope tag
251 <400> SEQUENCE: 10
252 His His His His His His
253 1 5
256 <210> SEQ ID NO: 11
257 <211> LENGTH: 6
258 <212> TYPE: PRT
259 <213> ORGANISM: Artificial Sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: Exemplary epitope tag
264 <400> SEQUENCE: 11
265 Asp Thr Tyr Arg Tyr Ile
266 1 5
269 <210> SEQ ID NO: 12
270 <211> LENGTH: 6
271 <212> TYPE: PRT
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Exemplary epitope tag
277 <400> SEQUENCE: 12
278 Glu Tyr Met Pro Met Glu
279 1 5
282 <210> SEQ ID NO: 13
283 <211> LENGTH: 11
284 <212> TYPE: PRT
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Exemplary epitope tag
290 <400> SEQUENCE: 13
291 Ala Ser Met Thr Gly Gly Gln Gln Met Gly Arg
292 1 5 10
295 <210> SEQ ID NO: 14
296 <211> LENGTH: 10
297 <212> TYPE: PRT
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Exemplary epitope tag

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/665,883

DATE: 03/07/2005

TIME: 10:56:24

Input Set : D:\46699-20011.00 - Seqlist.txt

Output Set: N:\CRF4\03072005\J665883.raw